Optics and Lasers in Engineering **17** (1992) 263–264

CONTENTS OF VOLUME 17

Number 1

Novel Two-dimensional Laser Scanning Technique 1
D. L. MACFARLANE, W. Y. KIM, J. S. NILVI, T. NUTH & V. TAN (USA)

Interpretation and Classification of Fringe Patterns 9
HUANG ZHI & ROLF B. JOHANSSON (Sweden)

Measurement of Length with High Accuracy and Large Range 27
CHEN LINGLI, SHEN LANSUN & SUN BAOGEN (People's Republic of China)

Impact Wave Propagation in a Thick Composite Plate Using Dynamic Moiré Interferometry 35
J. S. EPSTEIN, V. A. DEASON & M. G. ABDALLAH (USA)

Research Notes

Real-time Thermography in Metal Inspection 47
K. IKONEN (Finland), K.-E. PEIPONEN & TOSHIMITSU ASAKURA (Japan)

Holographic Inspection of Metal Objects 51
TIMO K. HARTIKAINEN (Finland), KAI-ERIK PEIPONEN & TOSHIMITSU ASAKURA (Japan)

Book Reviews 55

Calendar 59

Number 2

Real Time Measurement of Surface Roughness on Ground Surfaces Using Speckle-Contrast Technique 61
ULF PERSSON (Sweden)

Study into Penetration Speed During CO_2 Laser Cutting of Stainless Steel . . . 69
B. S. YILBAS (Turkey), R. DAVIES (UK) & Z. YILBAS (Turkey)

On the Sensitivity of Coherent Gradient Sensing: Part I—A Theoretical Investigation of Accuracy in Fracture Mechanics Applications 83
HUGH A. BRUCK & ARES J. ROSAKIS (USA)

Specular Reflectance of Cold-Rolled Aluminum Surfaces 103
R. SILVENNOINEN, K.-E. PEIPONEN (Finland), T. ASAKURA (Japan), YAN-FANG ZHANG, CONG GU, K. IKONEN (Finland) & E. J. MORLEY (Norway)

Book Reviews 111

Calendar 117

Optics and Lasers in Engineering (**17**) (1992)—© 1992 Elsevier Science Publishers Ltd, England. Printed in Northern Ireland

Numbers 3–5

Special Issue on Optical Methods for Thermal & Fluid Flow Diagnostics

Guest Editorial 119

The Use of Interferometry in the Study of Rotorcraft Aerodynamics 121
LAWRENCE W. CARR & YUNG H. YU (USA)

A Generalized Iterative Approach to Curved-Ray Tomography 147
ALLAN T. DOLOVICH & G. M. L. GLADWELL (Canada)

Computational Tomographic Reconstruction for Limited Ill-Posed Interferometric Data 167
H. SUN & S. S. CHA (USA)

Bending Effect on Light Propagation in an Optical Fiber: Application to a Temperature Sensor 179
MATHILDE SEMENKOFF (France)

Optical Evaluation Methods in Particle Image Velocimetry 187
P. V. FARRELL (USA)

Processing of Three-Dimensional Particle Tracking Velocimetry Data 209
JAMES A. LIBURDY & EDWARD F. YOUNG (USA)

Real-Time Laser Doppler and Phase Doppler Signal Processors 229
HONG TAN & JULIE LOH (USA)

Laser Doppler Velocimetry Measurement at a Hard-to-Reach Intake Port of a Two-Stroke Engine 241
B. CHEHROUDI & D. SCHUH (USA)

Announcement 259

Calendar 261